

## **REMARKS**

Applicant has amended Claims 2, 3, and 7. Claims 1-10 remain in the application. Applicant asserts that no new matter has been added. Reexamination and reconsideration of the Application is hereby requested.

Each of the amendment to the claims was made exclusively for the purpose of correcting either informalities or incorrect dependency. It is understood that the amendments to the claims do not change or modify the scope of any claim in view of the prior art and, therefore, do not limit application of the doctrine of equivalents to any claim.

### ***Drawing Objection***

The Examiner has objected Fig. 1 for containing typographical errors. A proposed amendment to Fig. 1 according to the Examiner's suggestion is submitted herewith for the Examiner's approval.

### ***Claim Objections***

The Examiner objected to claims 2, 3, and 7 for containing informalities. These claims have been amended according to the Examiner's suggestion. Therefore, Applicant respectfully requests the objections be withdrawn.

### ***Claim rejection under 35 U.S.C. §112***

The Examiner rejected claim 3 under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 3 has been amended to reflect the proper dependency from claim 2, thereby eliminating indefiniteness. It is respectfully requested the rejection under 35 U.S.C. §112 to be withdrawn.

### ***Claim rejection under 35 U.S.C. §103***

The Examiner rejected claims 1-10 under 35 U.S.C. §103(a) as being unpatentable over Zhang (U.S. Pat. No. 6,313,696) in view of Sasaki (U.S. Pat. No. 5,039,873). Applicant respectfully traverses the rejection and requests reconsideration in view of the above amendments and the following remarks.

The Examiner stated that Zhang disclosed all elements of claim 1, except a passive bias circuit. The Examiner further stated that Sasaki teaches that when a transistor is on, it is functionally equivalent to a resistor. Thus, the Examiner concluded that the combination of Zhang and Sasaki renders claim 1 obvious.

A transistor may be functionally equivalent to many different devices, depending on its operating condition, as disclosed by Sasaki: a FET is equivalent to a resistor when the FET is on (Fig. 4(c), col. 1, lines 20-22); however, a FET is equivalent to a capacitor when the FET is off (Fig. 4(b), col. 1, lines 20-22). Being functionally equivalent to a resistor during a certain operating condition does not mean that it is physically equivalent for all operating conditions. Even if a transistor is functionally equivalent to a resistor under a certain operating condition, the transistor cannot be replaced physically by the resistor without modifying the entire circuit.

Claim 1 specifically recites a passive bias element. The biasing element disclosed in Zhang is an active biasing element based on several active transistors 32, 33, 36, and 37. The addition of Sasaki, while demonstrating that transistors having resistance, does not show passive biasing of an amplifier. Nothing in Zhang or Sasaki, alone or in combination, teaches or suggests passive biasing.

Furthermore, claim 1 also recites that “the passive bias element [is] capable of biasing the active differential amplification element so that the active differential amplification element operates in a *saturation mode*.” Nothing in Zhang or Sasaki, alone or in combination, teaches or suggests a biasing of a differential amplifier in saturation mode.

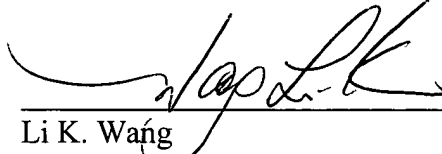
Finally, Applicant cannot find any suggestion to combine the cited references in either Zhang or Sasaki. Applicant respectfully requests that the Examiner point out the required suggestion to combine, pursuant to MPEP 706.02(j).

Therefore, Applicant submits that claim 1 and claims 2-6 that depend therefrom are patentable over the cited references, and Applicant request that these rejections be withdrawn.

For the similar reasons stated above, Applicant submits that claim 7 and claims 8-10 that depend therefrom are equally patentable over the cited references, and Applicant request that these rejections be withdrawn.

No addition fees are believed due. However, the Commissioner is hereby authorized to charge any additional fees which may be required, including any necessary extensions of time, which are hereby requested, to Deposit Account No. 501403.

1/8/03  
Date

  
Li K. Wang  
Registration No. 44,393

Arnall Golden Gregory LLP 1201 West Peachtree Street Suite 2800 Atlanta, GA 30309-3450	Tel. 404-873-8734 Fax 404-873-8735 E-Mail: li.wang@agg.com
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Lucille Golden-Gregory

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